Introducing...

A well-designed TECO glass furnace delivers high quality glass with excellent fuel economy. Furthermore, close control of melting conditions can minimise the discharge of some pollutants to atmosphere.

This philosophy has underpinned its latest innovation; a new generation of end-port regenerative furnaces with a wide range of applications in the glass industry. These can be designed to have furnaces small or large, produce an increased daily tonnage of quality glass every day and operate with a reduced consumption of energy.

For more information about our individual services please contact us:

Telephone: +1-419-537-9711
Email: sales@teco.com
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Improved batch charging

Mixed batch and cullet is charged via an oscillating pusher-type machine, to control the rate of feed. This minimises the risk of dust pick-up from the batch and reduces emissions.

Production flexibility

If there is a requirement for improved glass quality, additional output, or coloured glass to be produced, a boost system will be incorporated into the design. TECO will design the boost system with two zones where a substantial increase is required.

Instrumentation and control system

This employs the most up-to-date technology that is fail-safe with manual back-up systems and remote access. A closed-circuit TV system is normally incorporated to visually monitor and record conditions, which can be complemented with thermal imaging equipment to give continuous information on flame and batch pile condition. There are individual interfaces for each component, but each can handle the entire system if required.

Glass conditioning

TECO offers the most efficient and simple to use glass conditioning system on the market.

- Air dampers provide low maintenance air inlets and flues controlling pressure
- Higher glass pulls and reduced head-loss due to rapid cool technology
- Modular refractory construction for ease of assembly
- High pressure firing for increased turndown and safety of the combustion system.
- Improved fuel efficiency and low maintenance of combustion system due to constant air/gas ratio
- Low forward velocity burners for accurate control of heat release to complete conditioning process Process controls make even the most sophisticated simple to control
- Control components are easily accessible from one station

The key features of the TECO furnace design are a carefully engineered insulation package, good sealing to minimise air in-leakage, excellent heat recovery from efficient regenerators, a well-designed dog-house and charging system, a sunken throat and, not least, a precise and accurate control system. Our designs deliver high quality glass with excellent fuel economy. Close control of melting conditions also minimises the discharge of some pollutants into atmosphere.

Cutting edge installations incorporate low NOx single fuel or dual-fuel burners. Change over between gas and oil is simple. The well insulated and sealed-in design also prevents the entry of parasitic air, so that combustion is more controlled and performance improved.

End-port regenerative furnaces provide high levels of preheat with minimal maintenance, reducing the amount of fuel required, lowering the volume of exhaust gas and reducing emissions.

Refractories for improve performance

Our designs incorporate refractories which are resistant to the most corrosive glass; specifically chosen to minimize glass defects. Improvements in refractory materials have also helped counter heavy wear and campaign life to be extended. Furnaces are designed using the optimum materials for each location and taking into account expected campaign life and capital cost.

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End Port Furnaces

As part of the TECO Group, Toledo Engineering, Tecoglors and KTG Systems can offer complete capabilities in glass furnaces of all types, with KTG Engineering supporting this activity as glass plant equipment manufacturers. Zedtec are the TECO Group specialists in forehearth and working end technology. EAE Tech provides high quality industrial automation engineering services and custom control systems.

The TECO Group has been serving the world’s primary glass manufacturing industry since 1927.